

In the Claims

1. (Currently amended) A method of assisting scheduling with automation, the method comprising:

receiving a verbal scheduling request from a customer at a voice services node;

formulating request data to a schedule database, the request data being formulated based on keywords of the verbal scheduling request received from the customer, wherein formulating the request data comprises:

accessing a profile for the customer from a profile database to determine preferences for the customer, the profile database comprising a profile database storage maintained only at a premises of the customer, the preferences being previously obtained through at least one of the following: previous verbal communication with the customer, data message transaction with the customer, and tracking previous scheduling requests made by the customer, and

including the preferences in the request data, when information contained in the preferences is omitted in the request data, to determine whether the request is compatible with a current schedule, wherein including the preferences comprises:

accessing the profile for the customer from the profile database,

searching for the preferences containing the information omitted in the request data, and

updating the request data to include the preferences containing the information omitted in the request data, wherein updating the request data to include the preferences containing the information omitted in the request data does not require further customer interaction;

receiving a scheduling update signal from a schedule owner, the scheduling update signal providing an indication of availability for the current schedule stored in the schedule database, the indication of availability including a quantitative capacity;

formulating a command to the schedule database based on the received scheduling update signal to update the current schedule;

comparing the request data to the current schedule of the schedule database to determine whether the request data is compatible with the current schedule of the schedule database,

wherein the update to the current schedule is considered when determining whether the request is compatible;

when the request is compatible with the current schedule, altering the current schedule of the schedule database based on the request data; and
generating a notification signal of the alteration to the current schedule.

2. (Previously presented) The method of claim 1, further comprising interpreting the verbal schedule request to produce the request data.
3. (Previously presented) The method of claim 1, wherein the verbal scheduling request is a voice-over-IP call.
4. (Previously presented) The method of claim 1, wherein the verbal scheduling request is received over a public switched telephone network.
5. (Previously presented) The method of claim 1, wherein receiving the scheduling request comprises receiving a wireless data transmission from a wireless device in use by the customer and extracting the request data from the verbal scheduling request of the wireless data transmission.
6. (Original) The method of claim 1, wherein the notification comprises a confirmation provided to the customer.
7. (Original) The method of claim 6, wherein the confirmation is a verbal confirmation provided from a voice services node.
8. (Original) The method of claim 7, wherein the confirmation is an email provided to the customer over the Internet in addition to the verbal confirmation.
9. (Original) The method of claim 7, wherein the confirmation is a wireless data message provided to a wireless device of the customer in addition to the verbal confirmation.

10. (Original) The method of claim 1, wherein the notification comprises a confirmation provided to the schedule owner.

11. (Original) The method of claim 10, wherein the confirmation is a web site displaying the current schedule.

12. (Original) The method of claim 10, wherein the confirmation is a wireless data message provided to a wireless device of the schedule owner.

13. (Canceled)

14. (Canceled)

15. (Original) The method of claim 1, wherein the notification signal comprises a confirmation provided to the customer by providing a verbal notice from a voice services node and by providing an electronically delivered non-verbal message.

16. (Canceled)

17. (Canceled)

18. (Currently amended) The method of claim [[16]] 1, wherein the indication of availability specifies an accepted schedule request decreasing remaining capacity.

19. (Currently amended) A method of assisting scheduling with automation utilizing verbal communication, the method comprising:

receiving a set of verbal responses for a schedule request from a customer at a voice services node;

interpreting the set of verbal responses to produce request data, the request data being based on keywords of the set of verbal responses received from the customer;

accessing a profile database, the profile database comprising a profile database storage maintained only at a premises of the customer, to search for preferences containing information omitted in the request data, the preferences being previously obtained through at least one of the following: previous verbal communication with the customer, data message transaction with the customer, and tracking previous scheduling requests made by the customer;

including the preferences containing the information omitted in the request when information is omitted in the request data, wherein including the preferences comprises:

accessing the profile database,

searching for the preferences containing the information omitted in the request data, and

updating the request data to include the preferences containing the information omitted in the request data, wherein updating the request data to include the preferences containing the information omitted in the request data does not require further customer interaction;

receiving a scheduling update signal from a schedule owner, the scheduling update signal providing an indication of availability for the current schedule stored in the schedule database, the indication of availability including a quantitative capacity;

formulating a command to the schedule database based on the received scheduling update signal to update the current schedule;

comparing the request data to schedule data of a current schedule to determine whether the schedule request is compatible with the current schedule, wherein the update to the current schedule is considered when determining whether the request is compatible; and

when the request is compatible with the current schedule, then adapting the schedule data of the current schedule based on the request data.

20. (Original) The method of claim 19, further comprising providing a set of verbal questions for a schedule request from the voice services node to the customer, wherein the set of verbal questions includes a question about a business name of interest to the customer.

21. (Original) The method of claim 19, further comprising providing a set of verbal questions for a schedule request from the voice services node to the customer, wherein the set of verbal

questions includes a question about a date and time of day to schedule.

22. (Original) The method of claim 19, further comprising providing a set of verbal questions for a schedule request from the voice services node to the customer, wherein the set of verbal questions includes questions about customer preferences.

23. (Previously presented) The method of claim 19, further comprising:
determining additional preferences of the customer from the request data to produce preference data; and
storing the preference data of the customer in the profile database.

24. (Previously presented) The method of claim 23, further comprising:
accessing the profile database storing preference data of the customer; and
when comparing the request data to the schedule data, also comparing preference data to the schedule data to further determine whether the schedule request is compatible with the current schedule.

25. (Original) The method of claim 24, wherein the customer places a voiced call to the voice services node, wherein storing the preference data comprises mapping an identifier of the voiced call from the customer to the location of the customer profile data containing the stored preference data, and wherein accessing the profile database comprises upon subsequent voiced calls having the electronic identifier to the voice services node, accessing the preference data for the customer based on the identifier.

26. (Original) The method of claim 25, wherein the customer provides a verbal customer identification as a verbal answer to the voice services node and wherein the verbal customer identification is interpreted to produce customer identification data, and wherein mapping the identifier of the voiced call further comprises mapping the customer identification data to the location of the customer profile data containing the stored preference data.

27. (Original) The method of claim 24, wherein a verbal answer is a business name and wherein

the preferences are stored according to business name data interpreted from the verbal answer, the method further comprising upon subsequent voiced calls between the voice services node and the customer, receiving a business name as a verbal answer from the customer, interpreting the verbal answer to produce business name data, and accessing the preferences for the business name data.

28. (Original) The method of claim 19, further comprising: generating confirmation data; converting the confirmation data to a verbal confirmation; and providing the verbal confirmation from the voice services node to the customer.

29. (Currently amended) A system for assisting scheduling with automation, the system comprising:

- a voice services node that receives a verbal scheduling request from a customer over a voiced call and provides scheduling request data for the verbal scheduling request, the scheduling request data being based on keywords of the verbal scheduling request received from the customer;

- a scheduling database containing data for a current schedule;

- a profile database containing preference data comprising information omitted in the scheduling request data, the profile database comprising a profile database storage maintained only at a premises of the customer, the preference data being previously obtained through at least one of the following: previous verbal communication with the customer, data message transaction with the customer, and tracking previous scheduling requests made by the customer, the preference data being used to update the scheduling request data, when the scheduling request data omits the information contained in the preference data, without requiring further customer interaction; and

- a network-based computer-implemented scheduling application operative to:

- receive the scheduling request data from the voice services node,

- receive a scheduling update signal from a schedule owner, the scheduling update signal providing an indication of availability for the current schedule stored in the schedule database, the indication of availability including a quantitative capacity;

formulate a command to the schedule database based on the received scheduling update signal to update the current schedule.

compare the scheduling request data to the data for the current schedule to determine whether the scheduling request data is compatible with the current schedule, wherein the update to the current schedule is considered when determining whether the request is compatible, and

adapt the data for the current schedule based on the scheduling request data when the scheduling request data is compatible with the current schedule.

30. (Previously Presented) The system of claim 29, wherein the voice services node interprets the verbal request to produce the request data for the scheduling request signal.

31. (Original) The system of claim 29, wherein the voiced call is over a public switched telephone network.

32. (Previously presented) The system of claim 29, wherein the voice services node receives the verbal scheduling request signal as a wireless data transmission from a wireless device in use by the customer and extracts request data from the verbal scheduling request of the wireless data transmission.

33. (Original) The system of claim 29, wherein the network-based computer-implemented application also generates a confirmation that is provided to the customer as a verbal confirmation provided from a voice services node.

34. (Original) The system of claim 33, wherein the computer-implemented application also generates a confirmation that is provided to the customer as a data message sent over a data network in addition to the verbal confirmation.

35. (Previously presented) The system of claim 33, wherein the computer-implemented application also generates a confirmation that is provided to the customer as a fax message provided in addition to the verbal confirmation.

36. (Original) The system of claim 29, wherein the computer-implemented application also generates a confirmation that is provided to a schedule owner as a web site displaying the current schedule.

37. (Original) The system of claim 29, wherein the computer-implemented application also generates a confirmation that is provided to a schedule owner as a wireless data message provided to a wireless device.

38. (Currently amended) A system for assisting scheduling with automation utilizing verbal communication, the system comprising:

- a voice services node that converts question data to provide a set of verbal questions for a schedule request to a customer, that receives a set of verbal answers from the customer, and converts the set of verbal answers into request data;

- a profile database containing preference data comprising information omitted in the request data, the profile database comprising a profile database storage maintained only at a premises of the customer, the preference data being previously obtained through at least one of the following: previous verbal communication with the customer, data message transaction with the customer, and tracking previous scheduling requests made by the customer, the preference data being used to update the request data, when the request data omits the information contained in the preference data, without requiring further customer interaction;

- a schedule database containing schedule data for a current schedule; and

- a network-based computer-implemented application operative to:

 - provide the question data to the voice services node,

 - receive the request data from the voice services node,

 - receive a scheduling update signal from a schedule owner, the scheduling update signal providing an indication of availability for the current schedule stored in the schedule database, the indication of availability including a quantitative capacity;

 - update the current schedule based on the received scheduling update;

 - compare the request data to the schedule data for the current schedule, and

adapt the schedule data according to the request data when the request data is compatible with the schedule data.

39. (Original) The system of claim 38, wherein the set of verbal questions includes a question about a business name of interest to the customer.

40. (Original) The system of claim 38, wherein the set of verbal questions includes a question about a date and time of day to schedule.

41. (Original) The system of claim 38, wherein the set of verbal questions includes questions about customer preferences.

42. (Previously presented) The system of claim 38, wherein the network-based computer-implemented application determines preferences of the customer from the request data to produce preference data, and stores the preference data of the customer in the profile database.

43. (Original) The system of claim 38, wherein the network-based computer-implemented application generates confirmation data upon adapting the schedule data, and wherein the voice services node converts the confirmation data to a verbal confirmation and provides the verbal confirmation to the customer.

44. (Currently amended) A method of assisting scheduling with automation, the method comprising:

receiving a verbal scheduling request from a customer at a voice services node over a voiced call;

formulating request data to a schedule database, the request data being formulated based on keywords of the verbal scheduling request received from the customer, wherein the schedule database maintains a current schedule for multiple businesses, and wherein the schedule database receives scheduling update signals from schedule owners of each of the multiple businesses, the scheduling update signals including a quantitative capacity, and wherein the schedule database updates each of the current schedules according to the scheduling update signals, and the request

data is formulated to determine which of the multiple businesses have a current schedule compatible with the verbal scheduling request, wherein formulating the request data comprises:

- accessing a profile for the customer from a profile database to determine preferences for the customer, the profile database comprising a profile database storage maintained only at a premises of the customer, the preferences being previously obtained through at least one of the following: previous verbal communication with the customer, data message transaction with the customer, and tracking previous scheduling requests made by the customer, and

- including the preferences in the request data, when information contained in the preferences is omitted in the request data, to determine whether the request is compatible with the current schedule, wherein including the preferences comprises:

 - accessing the profile for the customer from the profile database,
 - searching for the preferences containing the information omitted in the request data, and

 - updating the request data to include the preferences containing the information omitted in the request data, wherein updating the request data to include the preferences containing the information omitted in the request data does not require further customer interaction; and

- generating a first notification of the result of the request data to provide an indication to the customer of which businesses have a current schedule that is compatible with the request data, wherein the updates to the current schedules are considered in determining compatibility.

45. (Previously presented) The method of claim 44, further comprising:

- receiving a second verbal scheduling request from the customer at the voice services node over the voice call, wherein the second verbal scheduling request specifies a selected business from the multiple businesses provided in the first notification that have a current schedule compatible with the schedule request;

- formulating a query to the schedule database based on the received second verbal scheduling request to alter the current schedule of the selected business according to the scheduling request; and

- generating a second notification of the alteration to the current schedule.

